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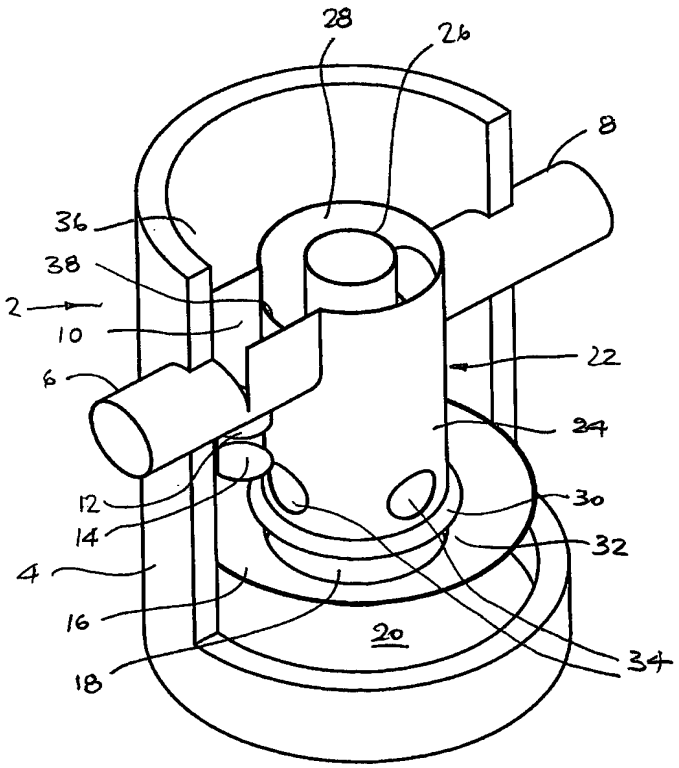
(54) Title: HYDRODYNAMIC TREATMENT DEVICE



(57) Abstract: A hydrodynamic treatment device comprises a vessel (2) within which is disposed an inner partition (24). The inner partition (24) divides the interior of the vessel (2) into outer and inner regions (22, 28). Flow enters the vessel (2) through a tangentially oriented inlet (14) and establishes a complex circulating flow within the vessel (2). Settleable solids migrate to the bottom of the vessel (2) and are deposited in a sump (20) through a solids outlet opening (18). Flow enters the inner region (28) through apertures (34) in the inner partition (24), and is discharged through an outlet duct (8). The inner region (28) is closed at its lower end by a frusto-conical, downwardly diverging lower wall (30) which projects outwardly from a central cylindrical wall (26).

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